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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,507	03/28/2002	Philippe Francois	221194US6XPCT	2415

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EXAMINER

KRISHNAMURTHY, RAMESH

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 08/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/088,507	FRANCOIS, PHILIPPE	
	Examiner	Art Unit	
	Ramesh Krishnamurthy	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12 - 16 and 19 - 22 is/are rejected.
- 7) ☒ Claim(s) 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

This office action is responsive to communications filed 05/30/2002.

Claims 12 – 22 are pending.

1. The specification lacks proper section headings such as Introduction, Summary of Invention, Brief Description of Drawings, etc. See MPEP 608.01(a).
2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12 – 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Trask (US 2,161,769).

Trask discloses (Figs. 1 – 3) a delivery valve for a compressor comprising:

A valve plate (9) pierced with at least one fluid delivery passage (11);

At least one delivery valve (16) closing said at least one fluid delivery passage (11) on a downstream side in a direction of the delivery of said fluid, and secured at one of its ends to the valve plate (9) by first fixing means (12); and

At least one delivery valve stop (13);

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Wherein said at least one delivery valve (16) is held at its other end, in almost permanent sliding contact with the valve plate (9) by a spring (18) secured to the valve plate (9) by second fixing means (12) (page 2, left column, lines 21 – 40).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trask as applied to claims 12 – 14 above, and further in view of Peruzzi et al. (US 5,110,272).

Task discloses the claimed invention with the exception of disclosing the fixing means to include rivets.

Peruzzi et al. discloses a compressor valve wherein (see Fig. 3) rivets (94) are used as fixing means.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the bolts in the fixing means of Trask with the rivets disclosed in Peruzzi et al. as they are art-recognized equivalents and serve equally well in securing the valve parts to the valve plate.

Regarding claim 22, it is noted that Peruzzi et al. discloses (Fig. 3) the valve element (60) to have a reduced width in a region of lesser stress thereby promoting the efficiency of the compressor by reducing the overall weight of the valve.

7. Claims 16, 19, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trask as applied to claim 12 - 14 above, and further in view of Augustin (US 2,908,287).

The patent to Trask discloses the claimed invention with the exception of disclosing pegs to prevent the valve and the spring from rotating.

Augustin discloses a compressor valve wherein a peg (60) is disposed in a non-circular aperture (61) for the purpose of preventing lateral pivoting i.e. rotation of the valve.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the valve arrangement in Trask with pegs for the purpose of preventing rotation as recognized by Augustin.

Regarding claim 21, it is noted that the use of a star shaped orifice as opposed to the non-circular slot in Augustin pertains to a mere change in shape of the orifice and the courts have generally held a change in the shape of a prior art device to be a design consideration involving only routine skill in the art. In re Dailey, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

8. Claims 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record neither shows nor teaches a combination for the claimed delivery valve device that comprises in combination with other recited elements, two

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delivery valves closing two passages in the valve plate, wherein said spring is a single spring for the two delivery valves and said stop is a single stop for the two delivery valves.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Holdsworth, Orr, disclose compressor valve devices having multiple valves. Doeg discloses a refrigeration apparatus. Ranft et al., Bellmer and Moulton disclose various valve arrangements. Kobayashi discloses pegs for restraining rotation of compressor valve. Ishijima et al., Sasano et al., Ahn and Rene et al. disclose various arrangements of compressor delivery valves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Rivell, can be reached on (703) 308 - 2599. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 - 9302 and for after-final communications, the fax phone number is (703) 872 9303.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.



Ramesh Krishnamurthy
Examiner
Art Unit 3753
July 28, 2003